

# PATENT APPLICATION

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q80674

Kiyoaki EGAWA

Appln. No.: 10/809,364

Group Art Unit: 2652

Confirmation No.: 7561

Examiner: Not yet assigned

Filed: March 26, 2004

For: STORAGE MEDIUM TRANSPORTING APPARATUS WITH AN IMPROVED

TRANSMISSION MECHANISM FOR DRIVING A PICKER

# INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

- 1. Japanese Patent Application Publication No. 2883013, published February 5, 1999.
- 2. Japanese Patent Application Publication No. 10-40616, published February 13, 1998.
- 3. Japanese Patent Application Publication No. 2-42671, published February 13, 1990.
- 4. Japanese Patent Application Publication No. 2-232854, published September 14, 1990.
- 5. Japanese Patent Application Publication No. 3-147564, published June 24, 1991.

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INFORMATION DISCLOSURE STATEMENT

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6. Japanese Patent Application Publication No. 7-334910, published December 22, 1995.

- 7. Japanese Patent Application Publication No. 9-128864, published May 16, 1997.
- 8. Japanese Patent Application Publication No. 10-124964, published May 15, 1998.
- 9. Japanese Patent Application Publication No. 11-162055, published June 18, 1999.
- 10. Japanese Patent Application Publication No. 11-259939, published September 24, 1999.
- 11. Japanese Patent Application Publication No. 11-328816, published November 30, 1999.
- 12. Japanese Patent Application Publication No. 2001-126353, published May 11, 2001.
- 13. Japanese Patent Application Publication No. 2002-25167, published January 25, 2002.
- 14. Japanese Patent Application Publication No. 2000-195137, published July 14, 2000.One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant encloses here with a copy of a corresponding Japanese Office Action dated June 20, 2006, and an English translation of the pertinent portions thereof which cites such documents and indicates the degree of relevance found by the foreign office.

INFORMATION DISCLOSURE STATEMENT

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The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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WASHINGTON OFFICE

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Date: September 13, 2006

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# INFORMATION DISCLOSURE

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ATEMENT BY APPLICANT	Filing Date	March 26, 2004	
ALEMENT DI ATTEICANT	First Named Inventor	Kiyoaki EGAWA	
(use as many sheets as necessary)	Art Unit	2652	
	Examiner Name	Not yet assigned	Π

Application Number

Confirmation Number

Attorney Docket Number

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite	Document	Document Number			
	No.1	Number	Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	
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	Cite	Foreign Patent Document			Publication Date	Name of Patentee or	
	No.1	Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation <sup>6</sup>
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÷,		JP	2-42671	Α	02-13-1990		
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NON PATENT LITERATURE DOCUMENTS				
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.

#### Claim 1:

Comparing the invention according to Claim 1 as amended by the amendment of proceedings dated May 29, 2006 to the invention described in the belowmentioned Cited Example 1, the "pair of gripping tabs," "gripping means," "insertion and removal direction driving means," "guiding means," "tab opening and closing means," "retaining member," "gripping tool base," "pair of finger arms," and "cam part" of the invention according to Claim 1 correspond to the "cartridge gripping parts 174a and 176a," "accessor hand mechanism," "motor 48," "slide shaft 112 and 114," "protrusions 182 and 184," "conveyance frame 50," "second slider 140," "fingers 174 and 176" and "finger opening and closing grooves 186 and 188" of the invention described in belowmentioned Cited Example 1.

Here, the invention according to Claim 1 and the invention described in belowmentioned Cited Example 1 differ in the point that in the invention according to Claim 1, "said gripping tabs are connected rotatably" to the "pair of finger arms," while in the invention described in belowmentioned Cited Example 1, "each finger 174, 176 has a cartridge gripping parts 174a, 176a at its end," and the "cartridge gripping parts 174a, 176a" are secured to the "fingers 174, 176."

However, the "hand arms 24, 24" of the invention described in belowmentioned Cited Example 2 have "rollers 31, 31" supported rotatably on the ends thereof, and no remarkable technical difficulty is found in using such "rollers 31, 31" instead of the "cartridge gripping parts 174a, 176a" of the invention described in belowmentioned Cited Example 1.

Therefore, the invention according to Claim 1 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2.

#### Claim 5

As described in paragraph (0082) of belowmentioned Cited Example 1, in the invention described in belowmentioned Cited Example 1, the "fingers 174, 176 are constantly impelled so as to close by means of tension coil springs 146 and 148."

Therefore, the invention according to Claim 5 as amended by amendment of proceeding dated May 29, 2006 could have been easily invented by a person skilled in the art based on the invention described in belowmentioned Cited Examples 1 and 2.

# Claim 6:

As described in belowmentioned Cited Example 1 (FIGURE 20), the "optical disk cartridge 30" used in the invention described in belowmentioned Cited Example 1 has a cutout in its side surface and is made so that the "cartridge gripping parts 174a, 176a" of "fingers 174, 176" engage with those cutouts.

Therefore, in the invention described in belowmentioned Cited Example 1, the distance between the "cartridge gripping parts 174a, 176a" when the "fingers 174, 176" are closed is set to be smaller than the width of the "optical disk cartridge 30." Furthermore, as described in belowmentioned Cited Example 1, paragraph (0082), "fingers 174, 176 are constantly impelled so as to close by means of tension coil springs 146 and 148."

Therefore, the invention according to Claim 6 as amended by amendment of proceeding dated May 29, 2006 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2.

#### Claim 7:

As described in belowmentioned Cited Example 1, paragraph (0071), in the invention described in belowmentioned Cited Example 1, "the pair of fingers 174, 176 are attached rotatably the second slider 140 by inserting shafts 178 and 180 into the hole." Furthermore, as indicated in (FIGURE 18) of belowmentioned Cited Example 1, the "finger opening and closing grooves 186, 188" comprise a "first portion 186a of groove 186" formed in the cartridge insertion and removal direction," and a "third portion 186c of groove 186" and "fourth portion 186d of groove 186" formed in the direction orthogonal to the insertion and removal direction of the cartridge.

Here, the question of what shape to make the "groove 186" of the invention described in belowmentioned Cited Example 1 is no more than a design matter which can be suitably determined as necessary by a person skilled in the art depending on how the "pair of fingers 174 and 176" are opened and closed. Thus, forming the "third portion

186c of groove 186" and "fourth portion 186d of groove 186" in an orthogonal direction is a matter which could be easily accomplished by a person skilled in the art.

Therefore, the invention according to Claim 7 as amended by amendment of proceeding dated May 29, 2006 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2.

# Claim 8:

The opening and closing operation of the "pair of fingers 174, 176" of the invention described in belowmentioned Cited Example 1 is described in paragraphs (0083) through (0090) of the belowmentioned cited example, with the "first region" and "second region" of the invention according to Claim 8 corresponding to the "region where 'protrusion 182' engages 'first portion 186a of groove 186' and "region wherein 'protrusion 182' engages 'third portion 186c of groove 186' and 'fourth portion 186d of groove 186'" of the invention described in belowmentioned Cited Example 1.

Therefore, the invention according to Claim 8 as amended by amendment of proceeding dated May 29, 2006 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Example 1.

#### Claim 9:

What relationship a protrusion and rotating shaft are placed in is no more than a design matter which could be determined as appropriate by a person skilled in the art.

Therefore, the invention according to Claim 9 as amended by amendment of proceeding dated May 29, 2006 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Example 1.

# Claim 10:

The invention according to Claim 10 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2 for the same reasons as discussed in the section on Claim 1.

#### Claim 14:

The invention according to Claim 14 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2 for the same reasons as discussed in the section on Claim 5.

### Claim 15:

The invention according to Claim 15 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2 for the same reasons as discussed in the section on Claim 6.

#### Claim 16:

The invention according to Claim 16 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2 for the same reasons as discussed in the section on Claim 7.

# Claim 17:

The invention according to Claim 16 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2 for the same reasons as discussed in the section on Claim 8.

#### Claim 18

The invention according to Claim 16 could have been easily invented by a person skilled in the art based on the inventions described in belowmentioned Cited Examples 1 and 2 for the same reasons as discussed in the section on Claim 9.

List of Cited Literature

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1. Japanese Patent No. 2883013

2. Japanese Unexamined Patent Application Publication H10-40616

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#### Record of Prior Art Literature Search Results

• Fields searched IPC G11B 15/68

G11B 17/22-17/30

DB name

• Prior art literature Japanese Unexamined Patent Application Publication H2-42671

Japanese Unexamined Patent Application Publication H2-232854
Japanese Unexamined Patent Application Publication H3-147564
Japanese Unexamined Patent Application Publication H7-334910
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Japanese Unexamined Patent Application Publication H10-124964
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